

U.S. Environmental Protection Agency, Region 8
Lead Action Plan
April 24, 2018

In response to Administrator Pruitt's vision for a collaborative multi-federal agency approach to reduce childhood lead exposure across the country, the U.S. Environmental Protection Agency (EPA) Region 8 identified specific areas for engagement with federal, state, tribal and local partners. Programmatic areas of focus include Drinking Water, Lead-Based Paint, Superfund, Brownfields, Response and the Resource Conservation and Recovery Act (RCRA).

According to the Centers for Disease Control and Prevention (CDC), reduction in lead exposure ranks as one of the ten great public health achievements in recent history¹, yet lead poisoning is still one of the top environmental health threats in the United States for children ages six and younger. Thus, it remains a public health priority to continue reducing lead exposure, especially in highly-exposed communities. There is no safe blood lead level in children² and even the smallest amount of lead can be harmful to a child's developing brain, resulting in detrimental effects on intelligence and behavior. Lead exposure is also associated with a variety of other harmful effects for both children and adults, including negative neurological, cardiovascular, kidney, developmental, and reproductive outcomes.

Progress in reducing lead exposure has not been realized equally across the United States. Low-income and minority children tend to live in areas that face increased risk to lead exposure because these communities often face disproportionate impacts from aging plumbing infrastructure that could contaminate their drinking water; older housing that is more likely to contain lead-based paint; and living near ongoing industrial activity or abandoned facilities. Effective communication and engagement with minority and low-income communities will be a priority as we prioritize and implement the activities described in this Plan.

To further prioritize the reduction of lead exposure, EPA Region 8 identified the key program areas with the greatest opportunities to reduce lead exposure. Each program area identified priority areas of focus, previous actions taken, planned future actions, associated commitments, and potential partnerships, as discussed below. Through cross-program coordination, we will reach out to potential partners, prioritize our efforts, collectively plan outreach events and identify geographical areas of greatest need. In some cases, outside of Indian country, our state partners are the primary government agencies responsible for the future planned activities and will decide which activities are of highest priority.

¹ <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6019a5.htm>

² <https://www.cdc.gov/nceh/lead/>, April 10, 2018

Drinking Water

EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead, and infants who consume mostly formula may receive 40 to 60 percent of their exposure to lead from drinking water. Lead typically enters drinking water when service pipes that contain lead corrode. Lead solder and faucets containing lead are also contributors to lead in drinking water. The Safe Drinking Water Act's Lead and Copper Rule (LCR) lays out regulations governing the monitoring and abatement of lead in drinking water for public water systems.

Priority Area 1: Promote Protection of Vulnerable Populations

Objective: Protect children from exposure to lead in drinking water at schools and child care facilities.

Previous Actions Taken:

- In 2017, EPA Region 8 mailed letters titled 'Reducing Lead in Drinking Water – Resources for Schools' to the Bureau of Indian Education, the Wyoming Department of Education, the South Dakota Department of Public Education, the North Dakota Department of Public Education, the Utah State Office of Education, the Montana Office of Public Instruction, the Colorado Department of Education to raise awareness of EPA's resources available to assist schools in reducing lead in drinking water.
- EPA Region 8 delivered a presentation on Reducing Lead in Drinking Water in Schools' at the 2017 Colorado Environmental Health Association (CEHA) conference.
- EPA Region 8 provided technical assistance to Denver Public Schools as they designed their lead testing program, and Denver Water led a national webinar to share their efforts as a best practice for other systems to follow.
- Colorado took a proactive approach to protecting children in schools when it passed HB 1306 which directs the Colorado Department of Public Health and Environment (CDPHE) to establish a grant program to test for lead in public schools. More information can be found at this site: <https://leg.colorado.gov/bills/hb17-1306>.

Future Actions:

- Coordinate with State Departments of Education and the Department of Indian Education to determine what actions they have taken since last year, and get feedback on what other actions EPA Region 8 could take to support this work.
- Obtain information on which schools in Region 8 have tested, communicated, and mitigated for lead and which ones have not. Discuss with partners the idea of creating an EPA website where this information is available for schools in Region 8.
- Perform 2-hour trainings open to stakeholders throughout Region 8 to promote testing and remediation for lead in schools (both drinking water and lead paint).
- Initiate partnerships with laboratories to support sampling programs for lead in schools in Indian country, and provide technical support on remediation options.

Associated Commitments:

- Perform 2-hour trainings open to stakeholders throughout Region 8 to promote testing and remediation for lead in drinking water (in conjunction with lead-based paint training).
 - FY18 – one webinar and one in-person training
 - FY19 – two webinars and two in-person trainings
- Analyze samples from schools in disadvantaged communities at Region 8 lab.
 - FY19 – 50 samples (Note: To be determined based on lab planning cycle)
 - FY20 – 50 samples

Potential Partnerships: EPA Region 8 Children's Environmental Health Program and Lead-based Paint Program, State Drinking Water Departments and Departments of Education, Department of Indian Education, Tribal Environmental Programs, Head Start Programs, and drinking water certified labs.

Priority Area 2: Address Systems with High Lead Levels

Objective: Assess the progress made in Region 8 states and Indian country since EPA's renewed focus on lead in drinking water, and identify areas of improvement.

Previous Actions Taken:

- In 2016, EPA Region 8 conducted a comprehensive study of Region 8 states' implementation of the LCR including interviews with state regulatory agencies, review of state policies related to the rule and review and follow up on systems that exceed action levels for lead. This review included EPA Region 8's work in Wyoming and Indian country where Region 8 directly implements the LCR, instead of delegating implementation to the states.
- EPA Region 8 then shared best practices identified through this process with all Region 8 states.
- EPA Region 8 continues to have a strong focus and follow up on LCR violations where it has direct implementation responsibilities in Wyoming and Indian country.
- EPA issued the Drinking Water Enforcement Response Policy (ERP) in December 2009. The ERP helps EPA and the states focus on public drinking water systems with the most serious or repeated violations, including noncompliance with the LCR.

Future Actions:

- Determine status of Region 8 State and Tribal efforts to reduce levels of lead in drinking water, following up on work completed in 2016.
- Determine priority systems for lead and what is required to reduce lead levels. Work with State staff to accelerate those actions, and ensure all follow-up actions are taken and the affected communities are informed.
- Ensure Region 8 states are uploading accurate 90th percentile lead data from their state database (SDWIS/State or others) to the federal database (SDWIS/Fed).
- Encourage all states to upload 90th percentile lead data to SDWIS/Fed for small systems. Utilize this database to more accurately track trends in 90th percentiles and corrosion control treatment.

- Work with Region 8 states to enforce the LCR.

Associated Commitments:

- Clean-up lead 90th percentile data in SDWIS/Fed by the end of FY18.
- Work with Region 8 communities and states to pilot using data on the age of homes to update or revise LCR sample siting plans.
 - FY18 – one community
 - FY19 – three communities
- Have lead work as a standing item on the EPA Region 8 monthly calls with the state drinking water programs.

Potential Partnerships: Region 8 State Drinking Water Departments and State Health Departments (where separate).

Priority Area 3: Develop Improved Tools for Water Systems to Conduct Lead Source Identification

Objectives: Assist water systems in locating and verifying lead service lines. Develop investigative tools to address any home with high lead levels.

Previous Actions Taken:

- EPA Region 8 provided 10 operator training sessions on LCR compliance in 2017 to improve operator's knowledge and implementation of the LCR and update sampling plans.
- EPA Region 8 provided technical support to operators of small and large systems on how best to address action level exceedances.
- EPA Region 8 developed and made available materials to help operators verify locations of lead service lines.
- EPA Region 8 has worked extensively with EPA's Office of Research and Development and Office of Water to identify the best corrosion control treatment and helped several water system operators optimize their current treatment.

Future Actions:

- Conduct additional operator training across Region 8 states and in Indian country on:
 - How to find unknown lead service lines (using materials already developed by EPA Region 8).
 - How to verify lead service lines (using materials already developed by EPA Region 8).
 - How to update LCR sample siting plans.
 - How to optimize corrosion control treatment. Consider targeting some trainings toward systems with high lead levels coming from non-lead service line sites.
- Where information on pipe material is missing, coordinate with states and tribes to train communities on how to use existing state databases (e.g., cadastral, COSA, Orion) and resources to identify the ages of homes as a proxy for pipe material to create a priority group for sampling or outreach. Pilot this approach with a few communities that lack pipe material information.

- Create a standard operating procedure (SOP) for how systems should respond to high individual lead samples, and include that information in operator trainings.
- Create a fact sheet that characterizes local efforts used to find lead service lines and include associated costs.
- Investigate the viability of a technology challenge for determining the location of buried lead service lines.

Associated Commitments:

- Develop an SOP for how systems should respond to individual high lead samples by December 2018.
- Create a fact sheet that characterizes local efforts to find lead service lines, including costs, by the Spring of 2019.
- Conduct operator trainings that cover the four bullets under the first item under future actions, above.
 - FY18 – one in-person training
 - FY19 – three in-person trainings

Potential Partnerships: Region 8 State Drinking Water Departments, Rural Water Associations, American Water Works Association.

Lead-based Paint

Today at least 4 million households have children living in them that are being exposed to high levels of lead. In the United States, there are approximately half a million children ages 1-5 with blood lead levels above the reference level at which CDC recommends public health actions be initiated. Most children get lead poisoning from lead-based paint in homes and child-occupied facilities built before 1978. When lead-based paint cracks, peels or is disturbed it makes a dangerous dust that can become a lead hazard. The Toxic Substances Control Act Lead-based Paint Rules promote the identification, evaluation, and abatement of lead-based paint hazards and help prevent new lead hazards from being created when lead-based paint is disturbed during renovation, repair and painting activities in pre-1978 homes and child-occupied facilities.

Priority Area 1: Protect Vulnerable Populations in Targeted Geographic Areas:

Objective: Implement EPA Region 8 Lead Place-based Initiatives to protect vulnerable populations from exposure to lead-based paint hazards. These initiatives take place in targeted geographic areas and are designed to utilize outreach tools to increase public awareness of EPA's Lead Renovation, Repair, and Painting (RRP) Rule and demand for lead-safe renovations. These outreach efforts are then followed by compliance assistance, work site inspections and enforcement efforts which aim to assure renovators work in a lead-safe manner when disturbing paint in pre-1978 homes and child-occupied facilities.

Previous Actions Taken:

- EPA Region 8 conducted the FY15/16 Lead Place-based Initiative in Northeast Denver neighborhoods identified as high risk. This effort included a series of local outreach activities followed by work site inspections and associated compliance assistance, as well as many resulting enforcement actions.
- In FY2017, EPA Region 8 identified a new geographic area of focus in West Denver for implementation of the FY17/18 Lead Place-based Initiative. The area was selected based on several criteria including various environmental justice screens, age of housing stock, and prevalence of renovation activity.
- In the current West Denver Place-based Initiative area, EPA Region 8 has implemented: 1) a series of public service announcement videos on English and Spanish-speaking television stations, news station websites and via a targeted email campaign; and 2) lead poisoning prevention awareness ads in local newspapers.

Future Actions:

- Continue outreach in the West Denver Lead Place-based Initiative area by publicizing Denver's new RRP Rule building permitting requirements and Denver Department of Public Health and Environment (DDPHE) Lead Program's new U.S. Department of Housing and Urban Development (HUD) lead inspection and abatement grant.
- Coordinate with the CDPHE and DDPHE Lead Programs on additional outreach activities and messaging.
- Conduct RRP compliance inspections throughout the West Denver Place-based Initiative area, including active worksite and recordkeeping inspections.
- Provide compliance assistance to regulated entities to increase the number of certified firms, certified renovators, and compliance with lead-safe work practice standards.
- Where noncompliance is identified, develop cases and issue enforcement actions as appropriate.
- Coordinate with the CDPHE Lead Program when issues arise or noncompliance is identified that falls under the purview of Colorado's authorized programs for Lead Activities and Pre-Renovation Education.
- Notify the DDPHE Lead Program if inspectors find: (1) lead poisoning hazard created from a renovation project and (2) child/children living in or adjacent to the home or child-occupied facility where the hazard was created.
- Partner with CDPHE's Lead and Child Care Licensing Programs to identify child care facilities with possible lead hazards. Consider testing and abatement services for these facilities if a Respondent is interested in a Supplemental Environmental Project.
- Develop a press release that showcases previous and upcoming activities that can be disseminated to both local and broader audiences.

Associated Commitments:

- Conduct 50 inspections within the West Denver Place-based Initiative area, including RRP active worksite inspections, RRP recordkeeping inspections, and 1018 Lead Disclosure inspections by the end of FY18.
- Respond to all inspections with one of the following: In Compliance Closeout Letter, Advisory Letter (compliance assistance), Notice of Noncompliance, or formal enforcement action by the end of FY19.

- Disseminate a press release that showcases the West Denver Lead RRP Rule Place-based Initiative by the end of FY19.

Potential Partnerships: U.S. Department of Health and Human Services (HHS), HUD, CDC and Agency for Toxic Substances and Disease Registry (ATSDR), Colorado Department of Public Health and Environment, Denver Department of Public Health and Environment, Denver Department of Development Services, Colorado Lead Coalition, Rocky Mountain Pediatric Environmental Health Specialty Unit, Registered Neighborhood Organizations and non-governmental organizations within the neighborhoods of focus.

Priority Area 2: Integrate Lead Poisoning Prevention into Local Building Permitting Operations:

Objective: Partner with local building code and permitting departments to prevent the creation of lead-based paint hazards during renovations by integrating lead poisoning prevention practices into their building permitting requirements.

Previous Actions Taken:

- EPA Region 8 partnered with various building permitting departments (City and County of Denver, City and County of Boulder, City of Aurora and Unincorporated Arapahoe County) to integrate the RRP Rule and lead-based paint testing into their operations and requirements in Colorado.

Future Actions:

- Document successful approaches and develop a ‘toolbox’ of project resources.
- Continue to partner with building permitting departments that serve housing and child-occupied facilities in high lead hazard areas throughout Region 8 based on lead “hot spot mapping.”
- Partner with the International Code Council and building permitting trade associations to promote and integrate lead poisoning prevention best practices into building code and permitting operations in Region 8.

Associated Commitments:

- Develop a Lead and Building Permitting ‘toolbox’ of resources that can be utilized when developing partnerships with other local building permitting departments in Region 8 states and Indian country by the end of FY18.
- Identify two new R8 state or tribal building permitting departments to partner with EPA Region 8 to integrate lead poisoning prevention best practices into their building code and permitting operations by the end of FY18.
- Deliver a Lead and Building Permitting presentation to an International Code Council chapter or building permitting trade association in Region 8 by the end of FY18.

Potential Partnerships: State and Tribal-level Public Health and Environment Departments; City and County Building Permitting Departments; City and County Individual and Business Licensing Departments; City and County Public Health and Environment Departments; Regional and State Chapters of the International Code Council; Building Code and Permitting Trade Associations; State or Local Lead Coalitions.

Priority Area 3: Integrate Lead Poisoning Prevention into Child Care Settings:

Objective: Protect vulnerable populations from exposure to lead-based paint hazards by integrating lead poisoning prevention practices into child care operations.

Previous Actions Taken:

- EPA Region 8 mailed lead poisoning prevention publications to all licensed child care facility operators in Colorado and North Dakota.
- EPA Region 8 partnered with the State of Colorado to update its child care health and sanitation rules to include lead-based paint regulations
- EPA Region 8 partnered with the State of Colorado to develop an infographic to provide lead-related compliance assistance to child care operators.
- EPA Region 8 provided lead-poisoning prevention training to Colorado child care inspectors to help them identify lead hazard risks and educate child care operators on how to prevent and eliminate lead hazards in child care settings.

Future Actions:

- Train Colorado nurse consultants, who visit licensed child care operations on a monthly basis, so they can provide lead poisoning prevention guidance and resources during their child care health consultations.
- Implement a similar Lead Poisoning Prevention and Child Care Initiative in one of the following states - Montana, North Dakota, South Dakota or Wyoming or a Region 8 Tribal Nation.

Associated Commitments:

- Create and deliver one lead poisoning prevention training which focuses on lead-based paint and lead in drinking water to the Colorado Child Care Nurse Consultants by the end of FY18.
- Identify a R8 state or tribal child care licensing agency by the end of FY18 who would like to partner with EPA and local public health and environment departments to implement a Lead and Child Care Initiative.
- In coordination with this state or tribal child care licensing agency and stakeholders, develop project plan for this initiative and begin implementation by the Q1 of FY19.

Potential Partnerships: State and Tribal Departments of Education and Public Health and Environment and Health and Human Services Early Childhood Departments; City and County Public Health and Environment Departments; and Early Childhood Councils.

Superfund Remedial and Response

Given the history of mining and smelter activities throughout the West, lead contamination is prevalent throughout the states in Region 8. The Administrator's Superfund Taskforce has identified as a priority bringing human exposures under control and collecting sufficient data to determine human exposure status at National Priorities List (NPL) sites. There are 13 sites in Region 8 where lead is a contaminant of concern and with human exposure not under control or that have insufficient data to determine human exposure status.

Priority Area 1: Superfund Remedial and Federal Facilities Sites with Known or Uncertain Exposures

Objective: Increase the focus on the 13 sites in Region 8 where lead is a contaminant of concern and with human exposure not under Control (8 sites) or that have insufficient data to determine human exposure status (5 sites).

Previous Actions Taken:

- During 2017, the EPA Region 8 Remedial Program completed a Five Year Review, which evaluates the protectiveness of the remedy, at one of the 13 sites mentioned above. This review identified the need to collect additional data to confirm the status of human exposures.
- The EPA Region 8 Remedial Program initiated Remedial Investigation/Feasibility Study activities at four of the 13 sites to identify and evaluate human and ecological exposures.
- The EPA Region 8 Remedial Program requested additional funding from EPA Headquarters to expedite implementation of the remedy at one site.

Future Actions:

- Complete Five Year Reviews at three of the 13 sites during 2018 and one additional site in 2019;
- Continue Remedial Investigation and Feasibility Study activities to collect additional exposure information at four of the 13 sites;
- Begin remedy implementation at one site, upon receipt of funding; and
- Conduct future Five Year Reviews and possible additional data collection at the remainder of the sites, which will enable determination of the human exposure status.

Associated Commitments

- For the 13 NPL sites where lead is a contaminant of concern and with human exposure not under Control or that have insufficient data to determine human exposure status, review each site for potential actions needed to bring exposures under control or to collect sufficient information to make a determination regarding exposure status; Complete the reviews for all 13 sites by September 30, 2018.

Potential Partnerships: State environmental departments in Colorado, Montana and Utah supporting Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) implementation; Responsible Parties implementing CERCLA response actions; ATSDR through Public Health Assessments; and Local health departments conducting outreach, education, blood lead screening and healthy home evaluations.

Priority Area 2: CERCLA Pre-Remedial Assessments for Potentially Lead Contaminated Lands

Objective: Evaluate pre-remedial sites for potential lead exposures originating from drinking water supplies, surface waters and soils. Assessments will include a focus on mining sites, where lead is often a contaminant of concern for either human health or ecological risks.

Previous Actions Taken:

- The EPA Region 8 Site Assessment Team initiated a mixed ownership abandoned mine collaboration with the State of Colorado in 2007 and expanded this effort to the States of Utah and Montana in 2016. This collaboration is developing comprehensive inventories of mines and mining features and has expedited and made more efficient work to reduce exposures at sites that otherwise would not have received prioritization for response actions.

Future Actions:

- The EPA Region 8 Site Assessment Team will employ the following strategies for mixed ownership mining sites:
 - Identify, fund and implement pilot projects of mutual interest to the stakeholders;
 - Create actionable data, which can be used by multiple parties to secure funds for cleanup;
 - Engage with stakeholders including city and county governments, local watershed groups and other non-profit organizations; and
 - Share innovative technologies, sound science and evolving engineering practices to develop creative approaches to project implementation.
- The EPA Region 8 Site Assessment Team will coordinate with the EPA Region 8 Environmental Justice Program and states to identify opportunities for focused CERCLA Pre-Remedial discovery efforts in overburdened communities with vulnerable populations, particularly rural communities.

Associated Commitments:

- The EPA Region 8 Site Assessment Team will coordinate with the EPA Region 8 Environmental Justice Program and states to identify opportunities for focused CERCLA Pre-Remedial discovery efforts in overburdened communities with vulnerable populations, particularly rural communities. The Assessment and Revitalization Program and the Environmental Justice Program will develop a prioritization plan to ensure that the most at-risk communities are addressed through the discovery efforts; Complete the prioritization plan by December 2018.

Potential Partnerships: U.S. Department of Agriculture's Forest Service, U.S. Department of Interior's National Park Service, Bureau of Land Management, Bureau of Reclamation, U.S. Geological Survey, State Public Health and Environment Departments, State Geological Surveys, Abandoned Mines and Mine Reclamation Departments, Divisions of Wildlife and Parks; Local Government Health Departments; Universities; and Nonprofit organizations including local watershed groups.

Priority Area 3: Emergency Response Removal Actions

Objective: Deployment of On-Scene Coordinators to assist with removing contaminated soil and replacing it with clean fill and topsoil where extremely high lead contamination presents an imminent and substantial endangerment to human health.

Previous Actions Taken:

- The EPA Region 8 Emergency Response Program has completed multiple removal actions at lead contaminated sites each of the past five years.

Future Actions:

- The EPA Region 8 Emergency Response Program will make residential properties containing extremely high levels of lead in soil a priority for removal actions.

Potential Partnerships: State, Tribal and local governmental agencies that identify extremely high lead concentrations in residential soils and who lack response capabilities; and EPA Region 8 Site Assessment and Brownfields Teams implementing CERCLA pre-assessments, Targeted Brownfields Assessments and Brownfields grants.

Brownfields

Brownfields are properties where expansion, redevelopment or reuse activities may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant. Lead is one of the most common contaminants inhibiting these activities at brownfield properties across Region 8. From vacant buildings to scrapyard soils to abandoned hard rock mine wastes, potential or confirmed lead contamination inhibits any number of community driven reuse and redevelopment objectives. EPA Region 8, in collaboration with its state and tribal partners, uses contractual and cooperative agreement tools to assist local communities and organizations with the investigation and cleanup of lead contamination enabling the reuse of brownfields.

Priority Area 1: Targeted Brownfields Assessments for Potentially Lead Contaminated Property

Objective: Provide environmental assessment services free of charge to communities through the Targeted Brownfields Assessment (TBA) program. TBAs are not grants, but rather

assessments conducted by environmental consultants under contract funded by EPA Region 8 at no cost to the community. Funds for actual cleanup or demolition work are not available under this program.

Previous Actions Taken:

- In FY2017, approximately three-quarters of the 73 Targeted Brownfields Assessments the EPA Region 8 Brownfields Team completed involved sick or abandoned buildings, most of which had asbestos and/or lead based paint issues. Approximately half of these buildings were located in Indian country.
- Targeted Brownfields Assessments help communities across Region 8 reduce the uncertainties of environmental contamination and identify cleanup options.

Future Actions:

- The EPA Region 8 Brownfields Team will coordinate with the EPA Region 8 Environmental Justice Program and Tribal Assistance Program identifying opportunities to promote the availability of Targeted Brownfields Assessment assistance to overburdened communities with vulnerable populations, particularly in Tribal country and other rural communities.

Associated Commitments:

- Program Supervisors and Team Leaders will meet quarterly during FY2018 to review TBA opportunities and accomplishments.

Potential Partnerships: State and Tribal environmental departments requesting Targeted Brownfields Assessments; Local governments requesting Targeted Brownfields Assessments; Prospective state voluntary cleanup participants requesting Targeted Brownfields Assessments; and Nonprofit organizations and local economic development agencies.

Priority Area 2: Brownfields Assessment and Cleanup Grants

Objective: Provide support to states, tribes and communities through cooperative agreements for the assessment and cleanup of contaminants at Brownfields sites. This may include lead from various sources, such as lead based paint, lead based paint contaminated soils, mining impacted soils and other past industrial practices.

Previous Actions Taken:

- The Region 8 Brownfields Team awarded 10 assessment and cleanup grants totaling \$2,493,475 in FY2017, which are being used to assess and cleanup brownfield properties including many with suspected or confirmed lead contamination.

Future Actions:

- The EPA Region 8 Brownfields Team plans to award no fewer than 10 new brownfields grants in FY2018, which will be used to assess and cleanup brownfield properties including many with suspected or confirmed lead contamination.

Associated Commitments:

- Timely complete grant awards in response to individual applications and track lead project completions and expenditures for FY2018; Report results in December 2018.

Potential Partnerships: State, Tribal, local and quasi-governmental agencies receiving Brownfields Assessment, Cleanup and Revolving Loan Fund grants; Nonprofits receiving Brownfields Cleanup grants; HUD Region 8 Office of Lead Hazard Control and Healthy Homes; HHS, CDC and ATSDR; and Local economic development agencies.

Resource Conservation and Recovery Act

Lead released into the environment from solid and hazardous wastes are prominent sources of childhood lead exposure. RCRA was enacted to reduce environmental contamination by regulating the disposal of solid and hazardous wastes, and direct the cleanup of certain hazardous waste sites. RCRA helps to reduce childhood lead exposures by reducing new releases of lead into the environment and eliminating existing sources.

Priority Area 1: Reduce Childhood Lead Exposures Through Corrective Action at RCRA Direct Implementation Sites

Objective: Reduce childhood lead exposures and protect other vulnerable populations by focusing resources on direct implementation of corrective action at Region 8 RCRA sites where lead is a primary contaminant of concern that drives remedy selection and cleanup; specifically, the former American Smelting and Refining Company (ASARCO) site in East Helena, MT.

Previous Actions Taken:

- EPA has actively worked to reduce lead contamination at this site through completion of a site-wide RCRA investigation and a study of corrective measures to address contamination.
- To address the most immediate concerns, EPA directed the implementation of three interim measures: the removal of the most contaminated soil, capping the former smelter site, and restoration of the adjacent creek. These actions ensured human and ecological exposures are under control based on current site uses and prevent the movement of contaminants off-site.
- A multilateral agreement between EPA, the State of Montana, East Helena Public Schools (EHPS), and Montana Environmental Trustee Group facilitated transfer of a contaminated parcel for the current construction of a new elementary school on-site. Terms of agreement included transfer of property for transaction cost to EHPS, and provision of grant money to remediate soil lead concentrations below required residential criteria.
- EPA and the Custodial Trustee assisted Lewis & Clark County in submittal of the petition to the Department of Natural Resources and Conservation for a Controlled Groundwater Area. This institutional control protects public health by preventing exposure contaminated groundwater.

- Corrective measures of the adjacent creek paved the way for transfer of over 300 acres in the riparian corridor to Prickly Pear Land Trust to manage this land for recreation and ecological function.

Future Actions:

- Coordinate with Montana Department of Environmental Quality (MDEQ) to hold a public meeting during Q3 of 2018 regarding the Corrective Measures Study Report, remedy selection, and current/future land management redevelopment opportunities.
- Work with the Prickly Pear Land Trust and the State of Montana on the plan to transfer land adjacent to the creek, manage the parcel for recreation, and implement additional ecological restoration projects.
- Pursue redevelopment opportunities on 2000 acres of former ASARCO property.
- Achieve the Ready for Anticipated Use designation and site closure.

Associated Commitments:

- Hold a public meeting on the results of the Corrective Measures Study Report during Q3 of FY18 to detail environmental progress at ASARCO site and provide opportunities for public comment.
- Convene a stakeholders meeting with PPLT, Custodial Trustee, and State of Montana (MDEQ and MDOJ) to facilitate land transfer within the Prickly Pear Creek reconstructed corridor.
- Achieve incremental accomplishments towards Ready for Anticipated Use milestone including final remedy selection and individual area RAUs.

Potential Partnerships: Montana Department of Environmental Quality, Montana Department of Justice, East Helena Public Schools, City of East Helena, Montana Environmental Trust Group, and Prickly Pear Land Trust.

Priority Area 2: Reduce Lead Exposures Through Proper Management of Lead-Containing Wastes Including Cathode Ray Tubes (CRTs) and Spent Lead Acid Batteries (SLABs)

Objective: Limit childhood lead exposures by ensuring that lead-containing wastes such as used CRTs^[1] and SLABs^[2] are properly stored and disposed or recycled, thus reducing environmental sources of lead. This is achieved by conducting inspections of facilities that manage used CRTs and SLABs to reduce the number of facilities where these lead-containing wastes are improperly stored, as well as providing technical and regulatory assistance to states, tribes, the general public, and hazardous waste generators regarding proper storage, disposal, and recycling practices.

Previous Actions Taken:

- EPA Region 8 initiated a quarterly call with Region 8 states to discuss emerging issues regarding CRT glass and electronic waste encountered by the states.
- In coordination with Region 8 states and tribes, EPA Region 8 conducts periodic inspections of facilities that manage lead-containing wastes including CRTs and SLABs.

Future Actions:

- EPA Region 8 will continue to host quarterly calls with Region 8 states to discuss emerging issues regarding CRT glass and electronic waste encountered by the States and to identify where lead containing wastes are being mishandled.
- In coordination with Region 8 states, EPA Region 8 will continue to use its authority to conduct inspections of electronics collection and recycling facilities and generators of all sizes, which manage spent lead acid batteries as part of their maintenance programs to ensure proper management of prevalent lead-containing wastes.
- As part of EPA Region 8's direct implementation in Indian country, inspections which include a compliance assistance component, will be conducted of facilities that generate lead acid batteries. Tribal inspectors accompanying EPA on these inspections will receive on-the-job training in the requirements for proper storage and disposal or recycling of these wastes.

Associated Commitments:

- Host a call each quarter throughout FY18 and FY19 with Region 8 states and tribes to provide guidance pertaining to lead-containing waste technical and regulatory issues.
- Conduct inspections of facilities that collect, recycle, and dispose of lead-containing wastes throughout FY18 and FY19.
- Provide on-the-job training to Tribal inspectors regarding proper storage, recycling, and disposal requirements for lead-containing wastes throughout FY18 and FY19.

Potential Partnerships: Region 8 states and tribes

^[1]CRTs are the screens of older-model, non-flat screened TVs and computer monitors.

^[2]Lead acid batteries are commonly found in automobiles and may be used as partial household backup power sources in the event of power outages.